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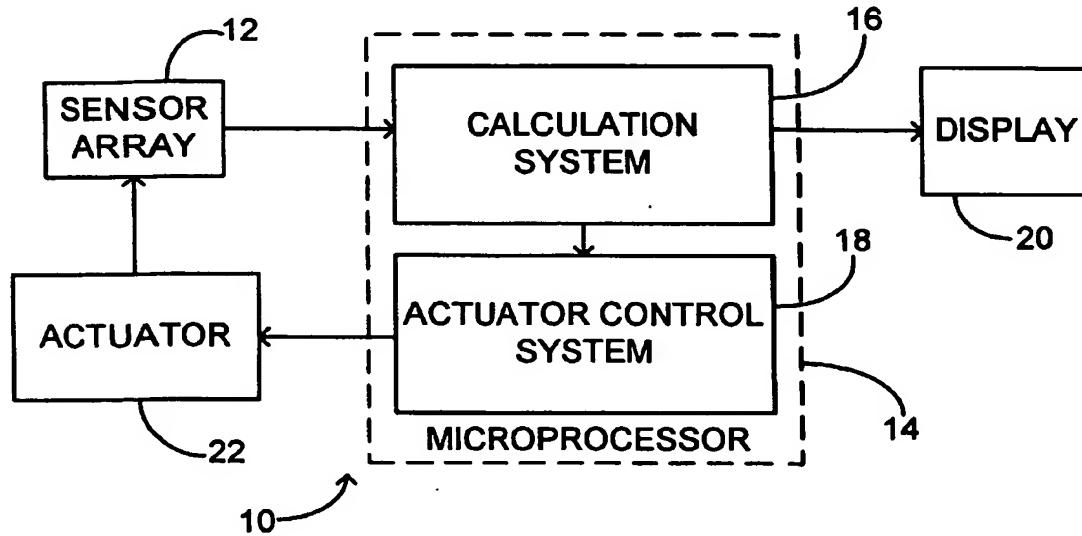
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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR DETECTING AND LOCATING GAS LEAKS



(57) **Abstract:** The invention provides an apparatus and method for detecting the location of a gas leak within a test region. The invention comprises an array of calibrated sensors for measuring a plurality of gas concentrations, a control system coupled to the sensor array for calculating and optionally displaying a direction of higher gas concentration, and, an actuator for moving the sensor array under control of the control system, wherein the control system causes the array of sensors to measure the gas concentrations and move in the direction of higher concentration until a stopping condition is achieved. The stopping condition may be achieved when the measured gas concentration exceeds a predetermined threshold or when the concentration otherwise likely corresponds to the leak location based on a comparison with previously measured values.

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